



AI Face Recognition

AI AIO Face Recognition (FR) enables the simultaneous identification of multiple people of interest in real time across several live camera streams.

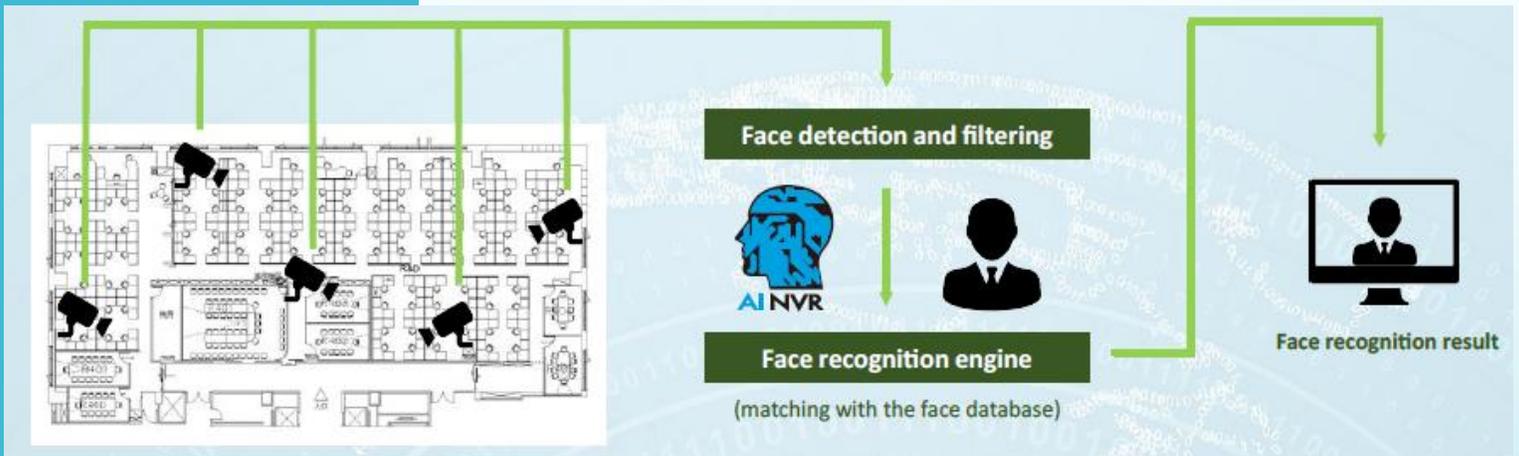
The AI NVR system prides itself as a compact, self-contained, easy-to-install and easy-to-use architecture for on-premise deployment to maximize the information security of the user organization.

AI AIO

How it works?

AI NVR Face Recognition continuously detects and recognizes faces of the detected people from IP video surveillance cameras, at a distance, on the move in natural settings. User can set up the alert rule to detect the target face, as well as a group of people by creating a list in the face database.

The Face Recognition solution relieves human operators from continuous monitoring with confidence. The AI NVR system also provides a comprehensive user interface to easily and swiftly access the collection of events registered by the system.



Face Search

Face Search is a sub-function of Face Recognition, avoids privacy concerns by not storing any faces in the search database. The Face Search algorithm compares the target face, which was detected from the uploaded image or the live streaming video, against all faces in the recorded video.

Search for certain faces in 2 ways:

by uploading an image of a person of interest and by selecting a detected face on camera



In both cases, the Face Search system checks all selected history records (e.g., up to 30 days) and returns the face images that match the target person.

User Benefits



High performance

- Identify people across multiple cameras in < 2 seconds to enable fast response time
- Accuracy > 90% for environment with good camera angles and lighting



Cost Saving

- No need to purchase expensive FR-built-in cameras.
 - Multiple cameras can share the FR software running on the platform to save license costs.
 - Intelligent video filter developed to filter out images without human faces from source video.
- Only images with human faces are fed to the FR engine to maximize efficiency.



Flexibility & Easy Maintenance

- FR engines can be upgraded on the server side for ease of maintenance and software upgrade.
- AI NVR FR engine is easy to integrate with any ONVIF standard based IP cameras.
- Unified user interface, learn once and apply to different face recognition engines

Use Cases



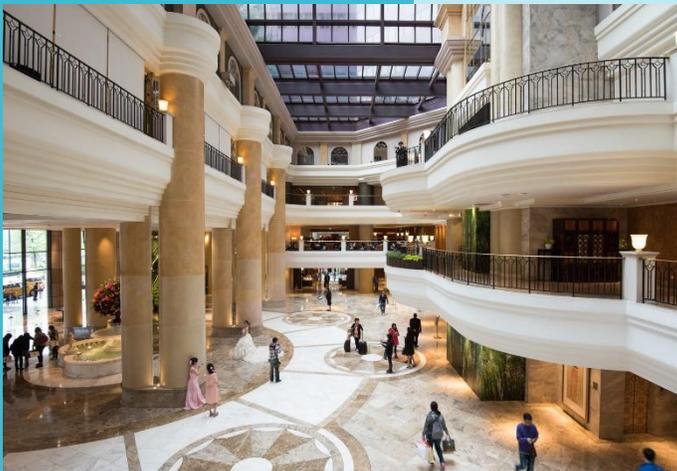
Retail Management

Detect, identify, and locate VIP guests in hotels, shopping centers, resorts, etc. to promptly attend to their needs, track their behavior pattern, and predict the locations that they tend to visit.



Find Missing Child in Airport

The security personnel can quickly upload an image with the child face and obtain a full list of camera feeds that show the child within seconds. Based on the camera and time stamp, the security personnel can locate the child immediately.



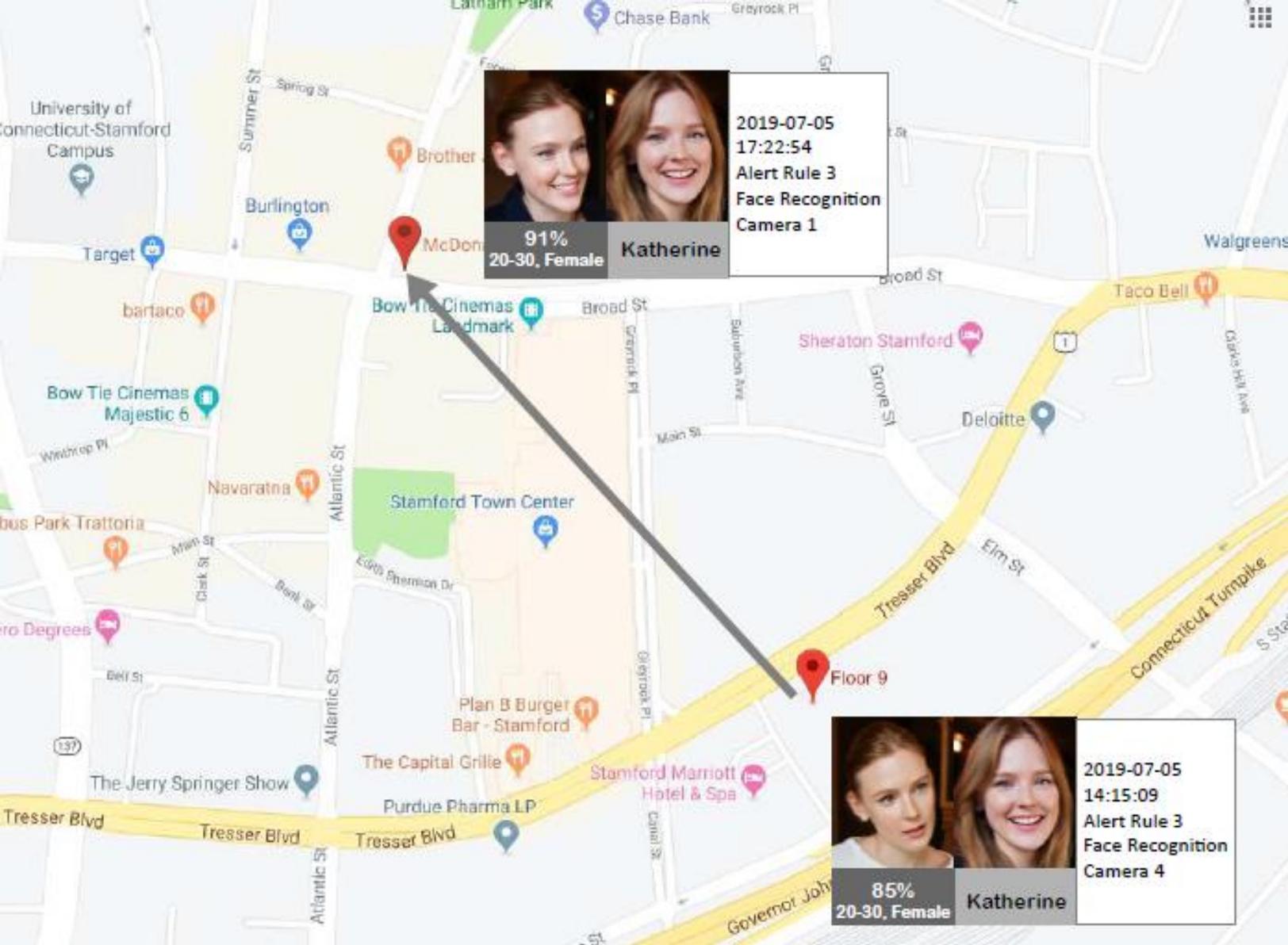
Access Control

Build up the lists of employees or group members, compare the detected face to the face database for check-in as they enter through the entrance and check-out from the exit. Also, send out the real-time alert once the detected person is outside the list.



Crime Suspect Management

Quickly identify and send an alert for the presence of high-risk individuals (thief, robber, terrorist, etc.) when they appear at certain locations and time. Or upload the image of the suspect and find when and where he/she appears.



Advance Application

Face Tracking

By setting up the alert rule, detect the target face and send out the notification in real time. The detected face can be tracked by locating the detection cameras on the map, plus on the event detected time.

Face Tracking provides the exact movement and route of the target person. Police department can know the track of the suspects and criminals, and predict the actions that they will take in order to give out an appropriate preparation.

Hardware Specification



| | AIO-100 series | | AIO-500 series | | |
|--|-----------------------------|----------------|---|--------------|--------------|
| Model series | AIO-110 | AIO-130 | AIO-510 | AIO-530 | AIO-550 |
| Number of Channels Supported for FS/FR | 4 | 8 | 8 | 16 | 32 |
| Form Factor | Mini-PC | Mini-PC | 2U | 2U | 2U |
| CPU (Intel) | Core i5 Series | Core i7 Series | Xeon E5 | Dual Xeon E5 | Dual Xeon E5 |
| AI-GPU | Nvidia High Performance GPU | | | | |
| Network | Dual Gigabit Ethernet | | | | |
| Memory (RAM) | 8GB | 16GB | 16GB | 32GB | 32GB |
| System HDD | 128GB SSD | | 240GB *2 SSD (RAID 1) | | |
| AI Storage | Include one 1TB HDD | | Two 3.5" hot swappable SATA disk bays (Support 1,2,4,6,8, 10TB HDD on RAID 0,1,5,6) HDD is optional | | |

Alguard is a global leader in highly-secured cloud video and big data solutions for video surveillance applications. Our products have been successfully deployed by many government, university and corporate enterprise customers. Our solutions deliver unmatched performance, scalability and cost savings. Alguard has world-wide offices and partners in North America (United States and Canada), Central and South America, East and Southeast Asia (Japan, Taiwan, Korea, Thailand, and Singapore), and the Middle East.